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Subject: March 7 Meeting of Health Study Board illustrates all the Problems that Greatly Limit Utility of Superfund Health Study--Time for EPA and MDEQ to get their Act Together

Health Study Working Group Meeting—Meeting of March 7

Submitted by: Dr. John W. Ray

I provide this summary of my interpretation of the meeting because it illustrates the inherent problems basic to the Butte Health Study—*secrecy, fear of the public, confusion, and, as far as I can tell, excessively limited scope, so limited as to severely limit the utility of the study along with bias and defensiveness*. The criticisms that I make are deliberately pointed. But this is an important study; Butte's health demands that we get it right.

I was re-invited to rejoin the Butte Health Study Working Group for the March 7 meeting held at the ARCO offices. (I had been invited earlier in the group's history but got removed from the invite list for several meetings for some unknown reason. Originally, I had to kind of force my way into the being allowed to attend the meetings as there was concern that if the press and public were invited, nothing would get done. I mention this because one of my concerns about the group is what I feel is its excessive secrecy. If the findings of this group are to have any public acceptance, the group's activities must be perceived as open and transparent. Why the fear of the public?)

The following is my summary of the points made at the March 7 meeting of the Butte Health Study Working Group held at the ARCO offices on Anaconda Road in Butte:

1. The requirement for the Health Study as articulated in BPSOU decision document related to the Residential Metals Abatement Plan is for a data analysis

of blood lead levels in children, i.e. biomonitoring data. This study will be primarily a data analysis of lead levels.

2. The decision documents provide for no requirement for the Health Study to have public engagement. In response to public interest, EPA has added this dimension to the Health Study. (My comment: To what purpose will be the public input? Public input has not been embraced as far as the deliberations of the group are concerned, what is going to change now?)
3. The goal of the Health Study under Superfund is to review biomonitoring data and review current studies. It will be a data analysis. Its primary purpose is to judge the efficacy of the RMAP program.
4. Mercury will not be part of the Health Study because RMAP has not had a noticeable number of mercury hits as they have done remediation.
5. Urinary arsenic *may be* looked at in the next five year health study. The Health Study will look at the Anaconda arsenic study for possible guidance for Butte. Study in Anaconda has had a high participation rate. Not much urinary arsenic data is available in Butte. (Comment: In the absence of hard data, the Precautionary Principle, which is part of EPA policy, would mandate a proactive approach. Err on the side of caution. Why not do some studies to get some data? What is the concern?)
6. Although beyond the focus of the UAO mandated Health Study, EPA has heard of other health concerns not related to the above and will try to answer these questions. (It is still how this will be done? When will it be done? What efficacy will this have? In fact the whole efficacy question as it relates to the Health Study is unanswered. How will the Health Study results be used? We don't know? Could the results lead to significant changes in the Superfund process in Butte? We don't know. What data suggests that Superfund is not efficacious in protecting public health, what will happen? We don't know. EPA seems often concerned with simply being able to say that we did the Health Study as mandated. Check it off our to-do list? Its impact or what follows from it isn't articulated and may not be that important for EPA.)
7. There is a mandate that EPA consider pertinent information coming from other studies regarding the health effects of *chemicals* in Butte. This is another area of EPA opaqueness. What does this provision mean? What does consider mean? What does the agency consider as pertinent? The term chemicals is such a broad and fuzzy term with little precision. Surprising that an agency committed to good science would use a term that is so ambiguous. All I have seen so far is an attempt to discredit the McDermott and Hailer studies because they produce results that the EPA doesn't like. Again, is this good science? Is this openness to data and information?

I still have a number of concerns and unanswered questions:

1. Why not be forthright and quit calling this a Health Study. By any accepted definition of the term health, this is not a health study. Call it a biomonitoring analysis of blood lead levels in children study. Health Study is a tailor made title

for raising unrealistic expectations as to what will be done. I will argue later on that the Health Study should look at a lot more than blood lead levels in children but at least be upfront about what EPA intends the “Health Study” to do and be. As I have said before, EPA has been all over this one. It has on some occasions tried to portray that study broadly as covering the whole spectrum of public health concerns; at other times EPA maintains a narrow focus that it will only look at lead levels in children. Currently, the amorphous scope and focus of the Health Study in Butte is another instance of a lack of clarity on EPA’s part.

2. The focus on blood lead levels in children, while very important, only looks at a small part of the Butte public health picture vis a vis exposure to the toxics of concern in Butte. (I am puzzled by the use of the term “chemicals” in the Health Study enabling document.) Other than anecdotal information, do we really know that mercury is not causing health problems? Arsenic is a major toxic in Butte yet EPA and MDEQ seem complacent and simply say we don’t have any data so we are at loss. Simply saying that the cleanup is meeting action levels, which is a problematic statement, does not assure that Superfund is effective in protecting the public health. Meeting action levels or ARARs are not ends in themselves but are supposed to be the means to an end—protecting public health. Also, EPA wants to confine itself only to looking at urinary arsenic which approach only looks at acute arsenic exposure and not at chronic arsenic exposure. There are several scientifically approaches to measuring chronic exposure to arsenic. Why not use one of those?
3. Diseases other than cancer can be caused by exposure to the toxics of concern in Butte. Yet, EPA and MDEQ ignore these in the current Health Study. (Unfortunately, MDEQ, which is supposed to be one of EPA’s partners, usually sits mute at the meetings I have attended.)
4. Age groups other than children can be harmed by exposure to the toxics of concern in Butte, yet EPA ignores other age groups. Why?
5. The BPSOU has a large environmental justice community yet they are not specifically addressed in the Health Study. In fact, the intent to rely on cancer registries would actually disenfranchise the environmental justice community in Butte because they do not have the same access to health care as do the non-poor.
6. Investigating the cumulative and synergistic effects of exposure to the toxics of concern in Butte is ignored by EPA and MDEQ.
7. The enabling document for the Health Study, as reproduced below, talks about the Health Study looking at chemicals about which there is concern. That is a pretty uncertain and amorphous designation—chemicals. Chemicals cover a lot of territory. What do chemicals mean? What is meant by the toxicology of chemicals? Are we also talking about food additives? Tobacco smoke? Antibiotics in poultry and beef? This term is so broad as to be meaningless.

The following are pertinent official statements regarding the purpose and conduct of the EPA mandated five year Health Studies. Nikia intimated that I was unaware of these at the last

Health Study meeting and that I should read them before commenting. Well, I had read them before the meeting. If I missed anything, please let me know.

The primary study objective to be addressed by the Superfund health study is the review and evaluation of available RMAP data that have been collected to date in order to objectively document the efficacy of the RMAP and identify any areas where improvement to activities conducted via the RMAP may be needed. To date, lead has been the primary focus of activities conducted under the RMAP.

Butte Silver Bow Health Department Report

4.1 HEALTH STUDIES

Butte-Silver Bow will perform public health studies every five years for a period of thirty years. The reports will respect the privacy of the participants and will be available to the public, the EPA, Montana Department of Environmental Quality (DEQ), and potentially responsible parties for the BPSOU. The health studies will include: Identifying chemicals that the residents may have been exposed to; Compiling and interpreting toxicology information on those chemicals; Routes of exposure; Compiling and interpreting the morbidity and mortality statistics as an epidemiology study; Compiling and interpreting health studies; and Compiling and interpreting influencing factors (environmental or cultural) for mortality rates. The public health studies will also include review of the latest epidemiological literature to determine if there are any newly established links between the contaminants of concern and specific diseases. Data gathered through the Residential Metals Abatement Program's (RMAP) routine activities and the results of previous health studies will be utilized to determine the content of future health studies and potential improvements to RMAP routine activities.

PURPOSE STATEMENT

To ensure public and environmental health of the residents of the Butte Priority Soils Operable Unit and the adjacent areas by effectively identifying and mitigating potentially harmful exposures to sources of lead, arsenic and mercury.

Final Multi Pathway Residential Metals Abatement Program

BSB and ARCO